



ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For the Year 1947

J. W. INNES, M.A., M.B., Ch.B., D.P.H.

MEDICAL OFFICER OF HEALTH

Printed by
George Todd & Son,
41-42 Strand Street, Whitehaven

HEALTH AND HOUSING COMMITTEE.

Chairman Councillor KNIPE.

Vice-Chairman Alderman STEPHENSON.

The Mayor (Alderman McSHERRY).

Aldermen—Gill and McALLISTER.

Councillors—Mrs. APPLEBY, EVANS, HANLON and PAE.

REPRESENTATIVES ON THE WEST CUMBERLAND JOINT HOSPITAL BOARD.

Alderman STEPHENSON.

Councillor KNIPE.

HEALTH DEPARTMENT.

J. W. INNES, M.A., M.B.,
Ch.B., D.P.H. *Medical Officer of Health*

J. F. LORD, C.R.S.I. *Sanitary Inspector*

A. A. BELDON, C.R.S.I. *Additional Sanitary Inspector*

W. F. LIDDELL *Pupil Sanitary Inspector*

Miss DAVIDSON *Clerk*

Miss G. BANKS *Clerk-Typist*

PART TIME.

J. STEPHEN FAULDS, *Bacteriologist, Cumberland*
M.D., F.R.F.P.S. *Laboratory*

C. J. H. STOCK, B.Sc.,
F.I.C. *Analyst*

Health Department,
81 Lowther Street,
Whitehaven.

31st May, 1948.

*To His Worship the Mayor,
The Aldermen and Councillors,
Borough of Whitehaven.*

MR. MAYOR, MRS. APPLEBY and GENTLEMEN,

I beg to submit my Annual Report as your Medical Officer of Health for the year 1947.

Some of the statistics are not as satisfactory as for the previous year. For instance the General Death Rate jumped by no less than 4.3 as against a rise of 0.5 for the whole country. This was mostly accounted for, however, by the unfortunate mining disasters which took place. Altogether the deaths of 87 men were attributable to Violent Causes other than Suicide and Road Accidents, as compared with 7 in 1946. Without these the rate would have been closely comparable with that for the country in general.

Another noticeable feature was the increase of Cancer deaths from 38 to 53, which was much above our average number, and gave a rate of 2.35 per thousand of population as compared with 1.85 for England and Wales, whereas in the past we had almost invariably shown a lower rate than that for the whole country.

The deaths of infants under one year of age, too, showed a very considerable increase, from a rate of 45 per thousand in 1946, to 58 per thousand as compared with a new low-level record of 41 for the whole country. When dealing with small numbers one does get rather violent fluctuations in rates from year to year, and it is only by taking a period of years that one gets a true picture of the trend, but nevertheless it is disappointing after we had reached our low-level record in the previous year to see such a jump in last year's figure.

On the other hand the records in connection with Notifiable Diseases were remarkably good. Leaving aside Tuberculosis and Pneumonia, there was only one death from a notifiable infectious disease—namely, one death from Measles. In last year's Report one was able to state that there had not been a death from Diphtheria in ten years. This year one can go one better. There was not even a notification of Diphtheria during

1947. Credit for this must surely go to immunisation, but it is to be hoped that the absence of this disease will not defeat our object by lulling parents into a false sense of security and making them careless of the protection that has brought about this happy state of affairs. The total number of new immunisations completed last year was 146 less than in the previous year, and the percentage of children under five years of age who were protected fell slightly below the previous year's figure. It cannot be emphasised too strongly that if parents are going to put their trust in the absence of the disease rather than in the protection that is offered against it, sooner or later some innocent victims will pay the penalty and one would appeal most earnestly to parents to have their children protected—even more especially the younger ones.

In common with the rest of the country we had to contend with an outbreak of Poliomyelitis or Infantile Paralysis during the summer months. Very fortunately the outbreak here did not assume serious proportions. Although there was a good deal of alarm at one time—attributable, in my opinion, to the undue amount of publicity given to the outbreak by certain sections of the press—and twelve so-called cases were sent into hospital, the diagnosis was confirmed only in four cases—three of which were of an abortive type, and one only showed any paralysis.

Tuberculosis, fortunately, showed a welcome improvement again, the rate of deaths per thousand of population falling during the year from 1.25 to 0.75, as compared with 0.55 for England and Wales, which latter figure shows a slight deterioration compared with the previous year. We were thus 0.20 still in excess of the general rate, and seeing that, as I have already mentioned, statistical rates for a small community tend to jump about from year to year, one would have to see a diminishing rate over a period of years before asserting that there has been any stabilised improvement.

The most urgent need at present is—as everywhere else in the country—for new houses. In 1947, 52 Council houses were completed, bringing the total of permanent houses completed since the war to 68 in addition to 50 temporary prefabs. Most of these are being allocated to overcrowding and to families who have not had houses of their own. Meanwhile the problem of unfit houses continues to mount up, and although one criticised the progress that could be made in slum clearance prior to the war and criticised the provision of houses, which then were allocated to that alone, as being quite insufficient to overtake that problem, it looks as if it will be years

before slum clearance can be resumed on anything approaching that scale, and by that time the problem will have been very much augmented by the further deterioration of properties that will have taken place.

In conclusion I wish to thank all members of this and other departments who have given help and co-operation, and also the Chairman and Members of the Health Committee for their continued interest and support in all matters pertaining to the health of the community.

I am,

Mr. Mayor, Mrs. Appleby and Gentlemen,

Your obedient servant,

J. W. INNES,

Medical Officer of Health.

A.—STATISTICAL SUMMARY.

I.—GENERAL STATISTICS.

Area of Borough in acres	4,315
Registrar General's estimate of resident population (mid year, 1947)	22,580
Number of Inhabited Houses (end of 1947) according to Rate Books	6,087
Rateable Value (1st April, 1947)	£104,091
Sum represented by a Penny Rate	£389

EXTRACTS FROM VITAL STATISTICS FOR THE YEAR.

BIRTHS.	Male.	Female.	Total.
Live Births—Legitimate	278	247	525
—Illegitimate	13	14	27
Total	291	261	552

Birth Rate per 1,000 of Population 24.4

	Male.	Female.	Total.
Still Births—Legitimate	5	6	11
—Illegitimate	—	—	—
Total	5	6	11

Rate per 1,000 total births 19.5

DEATHS.	Male.	Female.	Total.
Deaths (all ages)	241	132	373
Death Rate per 1,000 of Population		16.5	

Deaths from Puerperal Causes.

	Deaths.	Rate per 1,000 (Live & Still) Births
From Sepsis	nil	nil
From other causes	nil	nil
Total	nil	nil

Death Rate of Infants Under One Year of Age.

All infants per 1,000 live births	58
Legitimate infants per 1,000 legitimate live births	61
Illegitimate infants per 1,000 illegitimate live births	Nil

Deaths from

Cancer (all ages)	....	....	....	....	53
Measles (all ages)	....	....	....	....	I
Whooping Cough (all ages)	....	....	....	....	—
Diarrhoea (under two years of age)	....	....	....	....	I

POPULATION.

The Registrar-General's estimate of resident population in the Borough at the middle of 1947 was 22,580, an increase of 190 compared with the mid-year estimate for 1946.

The population at the last census and the mid-year estimates since are shown below :—

			<i>Actual Count at Census.</i>	<i>Registrar-General's Mid-Year Estimates.</i>
1931	....	....	21,142	21,270
1932	....	....	—	21,400
1933	....	....	—	21,220
1934 (Borough extended)	....	....	—	23,185
1935	....	....	—	23,060
1936	....	....	—	22,970
1937	....	....	—	22,380
1938	....	....	—	22,350
1939	....	....	—	22,370
1940	....	....	—	22,960
1941	....	....	—	23,640
1942	....	....	—	22,940
1943	....	....	—	22,490
1944	....	....	—	21,650
1945	....	....	—	21,600
1946	....	....	—	22,390
1947	....	....	—	22,580

BIRTHS.

Birth Rate per 1,000 of Population	....	....	24.9
„ „ England and Wales	....	....	20.5
„ „ 126 Great Towns	....	....	23.3
„ „ 148 Smaller Towns (population 25,000—50,000)	....	....	22.2
„ „ London Ad. County	....	....	22.7
„ „ County of Cumberland	....	....	22.0

The number of live births registered during the year was 552, 291 males and 261 females, of whom 13 males and 14 females were illegitimate. This shows an increase of 46 births as compared with the number for the previous year. Illegitimate births were three more and constituted 4.9% of the total as against 4.7 for the previous year, and 5.2 for the whole country. The Birth Rate was 24.4 per thousand of estimated resident population, the rate being 1.8 more than the rate for 1946. The rate for the country as a whole showed an increase of 1.4.

The following Table shows the average annual number of births and average annual Birth Rate per 1,000 of population by five-year periods since 1890, with the corresponding rate for England and Wales along with the actual figures since 1945 :—

Period.	Borough of Whitehaven.		England and Wales.
	Average Annual No. of Births.	Average Annual Birth Rate per 1,000 of population.	Average Annual Birth Rate per 1,000 of population.
1891—1895	586	32.0	30.5
1896—1900	595	30.9	29.3
1901—1905	644	33.3	28.2
1906—1910	592	30.6	26.3
1911—1915	568	29.6	23.6
1916—1920	533	27.8	20.1
1921—1925	559	27.6	19.9
1926—1930	485	24.0	16.7
1931—1935	449	20.5	15.0
1936—1940	416	18.4	14.9
1941—1945	446	19.8	16.2
	Number of Births.	Birth Rate per 1,000 of population.	Birth Rate per 1,000 of population.
1946	506	22.6	19.1
1947	552	24.9	20.5

DEATHS.

Death Rate per 1,000 of Population	....	....	16.5
„ „ England and Wales	....	....	12.0
„ „ 126 Great Towns	....	....	13.0
„ „ 148 Smaller Towns	....	....	11.9
„ „ London	....	....	12.8
„ „ County of Cumberland	....	....	13.8

The number of deaths of residents belonging to the Borough, after making allowance for inward and outward transfers of persons normally resident in the town who died away from home, and of persons who died in the town but who did not normally reside there, was 373, viz., 240 males and 133 females, which gives a Death Rate of 16.5 per thousand.

The actual number of deaths was 99 more than in the previous year, male deaths being increased by 108. This increase, as explained in the introduction, was largely due to mining disasters.

The chief causes of death during the year were Diseases of Heart and Circulatory System 105, Violent Causes 89, Cancer 53, Respiratory Diseases, Pneumonia, Bronchitis, etc., 38, and Tuberculosis 17.

The following Table shows the average annual number of deaths and the average annual crude Death Rate per 1,000 of population by five-year periods since 1890, with the corresponding rate for England and Wales, along with the actual figures since 1945 :—

Period.	Borough of Whitehaven.		England and Wales.
	Average Annual Number of Deaths.	Average Annual Death Rate per 1,000 of resident population.	Average Annual Death Rate per 1,000 of population.
1891—1895	372	19.9	18.7
1896—1900	368	18.1	17.7
1901—1905	368	19.2	16.1
1906—1910	393	20.4	14.7
1911—1915	350	18.2	14.3
1916—1920	315	17.3	14.4
1921—1925	320	15.6	12.2
1926—1930	292	13.8	12.1
1931—1935	281	12.8	12.0
1936—1940	307	13.6	12.5
1941—1945	270	12.0	12.0
	Number of Deaths.	Death Rate per 1,000 of resident population	Death Rate per 1,000 of population.
1946	274	12.2	11.5
1947	373	16.5	12.0

The ages of all cases who died during 1947 and the cause of death are shown in the following Tables :—

AGE AT DEATH OF ALL CASES, WHITEHAVEN BOROUGH, 1947.

Age Groups	Under 1 year	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	Over 65	Total
Males	20	—	—	1	—	2	1	4	10	31	38	28	41	65	241
Females	12	1	—	—	—	1	2	2	1	4	7	15	20	67	132

CAUSES OF DEATH DURING THE YEAR 1947.

Causes of Death	Males.	Females
All causes	241	132
Typhoid and Paratyphoid Fevers	—	—
Cerebro-spinal Fever	—	—
Scarlet Fever	—	—
Whooping Cough	—	—
Diphtheria	—	—
Tuberculosis of Respiratory System	7	6
Other Tuberculous Disease	3	1
Syphilis	—	—
Influenza	1	—
Measles	—	1
Acute Poliomyelitis and Encephalitis ...	—	—
Cancer	30	23
Diabetes	—	—
Cerebral Haemorrhage	12	17
Heart Disease	34	36
Other Circulatory Diseases	4	2
Bronchitis	6	4
Pneumonia (all forms)	13	7
Other Respiratory Diseases	5	3
Ulcer of Stomach or Duodenum	4	1
Diarrhoea (under 2 years)	—	1
Appendicitis	3	—
Other Digestive Diseases	3	1
Nephritis	3	6
Puerperal Sepsis	—	—
Other Maternal Causes	—	—
Congenital Debility, Premature Birth, Malformations, etc.	9	5
Suicide	1	—
Road Traffic Accidents	—	—
Other Violence	87	2
All Other Causes	16	16

MATERNAL MORTALITY.

No maternal Death took place within the year.

The rate per 1,000 total births was, therefore, nil as compared with the following rates for the whole country :—

		<i>No. of Deaths.</i>	<i>Rate per 1,000 Total Births.</i>	<i>England and Wales.</i>
From Sepsis	....	<i>nil</i>	<i>nil</i>	0.26
From other causes	....	<i>nil</i>	<i>nil</i>	0.91
		—	—	—
Total	....	<i>nil</i>	<i>nil</i>	1.17
		—	—	—

		<i>No. of Notifications.</i>		
Notifications of Puerperal Pyrexia	....	*8	14.2	7.16

*Includes one person not resident in the Borough, so that the nett rate to correspond with 1,000 births was 12.4.

INFANTILE DEATHS.

Death Rate of Infants under one year of age per thousand live births :—

Legitimate 61, Illegitimate Nil				Total 58
England and Wales	....	....	....	41
126 Great Towns	....	....	....	47
148 Smaller Towns	....	....	....	36
London	....	....	....	37
County of Cumberland	....	....	....	42

The number of deaths of children under one year of age during 1947 was 32, viz., 20 males and 12 females, which gives an Infantile Mortality Rate of 58 per 1,000 registered live births.

This rate shows an increase of 13 compared with that for the previous year.

The chief causes of the Infantile Deaths were Prematurity and Congenital Defects, which accounted for 13 of the 32 deaths, and Bronchitis and Pneumonia which accounted for 12. 16 or 50 per cent. of the deaths occurred in the neo-natal period, that is within the first month of life. The Mortality Rates for Male and Female Infants respectively were 69 and 46.

INFANTILE DEATHS SHOWN BY AGES AND CAUSE OF DEATH, 1947.

CAUSE OF DEATH.	AGE IN WEEKS.				AGE IN MONTHS.						Total Deaths.
	Under 1	1—2	2—3	3—4	Under 1 M th	1—2	2—3	3—6	6—9	9—12	
Premature Birth	5	—	—	1	6	—	—	—	—	—	6
Congenital Malformations and Debility	4	2	—	—	6	1	—	—	—	—	7
Bronchitis and Pneumonia	—	—	1	—	1	2	2	2	2	3	12
Accidents of Parturition	1	—	—	—	1	—	—	—	—	—	1
Accidental Suffocation	2	—	—	—	2	—	—	—	—	—	2
Other Accidents	—	—	—	—	—	—	—	1	—	1	2
T.B. Meningitis	—	—	—	—	—	—	1	—	—	—	1
Meningitis (unspecified)	—	—	—	—	—	—	—	1	—	—	1
	12	2	1	1	16	3	3	4	2	4	32

The following Table shows the annual average number of Infantile Deaths and the annual average rate per 1,000 live births by five-year periods since 1890, with the corresponding rate for England and Wales, along with the actual figures since 1945 :—

Period.	Borough of Whitehaven.		England and Wales.
	Average Annual Number of Deaths under one year of age.	Average Annual Infantile Mortality Rate per 1,000 registered live births.	Average Annual Infantile Mortality Rate per 1,000 registered live births.
1891—1895	88	148	151
1896—1900	89	150	156
1901—1905	92	143	138
1906—1910	84	142	117
1911—1915	79	140	110
1916—1920	62	117	90
1921—1925	57	102	76
1926—1930	44	89	68
1931—1935	33	74	62
1936—1940	27	65	56
1941—1945	25	56	50
1946	23	45	43
1947	32	58	41

B.—GENERAL PROVISION OF HEALTH SERVICES IN THE BOROUGH.

1. PUBLIC HEALTH OFFICERS OF THE LOCAL AUTHORITY.

These are shown at the beginning of the Report. There were no changes in personnel.

2. SERVICES PROVIDED IN THE AREA.

(a) *Laboratory Facilities.*—Clinical material and milk samples are examined at the Cumberland Laboratory, Carlisle, which operates the Public Health Laboratory Service. Under this service, which came into operation on the 1st April, the Bacteriology necessary for the diagnosis, prevention, and control of infectious disease is carried out without charge to the Local Authority, the cost being defrayed by the Medical Research Council for the Ministry of Health.

Under the same scheme, samples of milks, taken on their way to the consumer, are examined free of charge.

Water samples are examined by Mr. C. J. H. Stock, County Analyst, Darlington.

The following Bacteriological specimens sent by General Practitioners were examined during the year :—

		<i>Number Examined</i>	<i>Examined for</i>	<i>Positive</i>
Throat Swabs	....	11	Diphtheria	Nil
			Haemolytic Streptococci	3
			Vincent's	
			Angina	1
Faeces	....	1	Coli Typh. Group	Nil
Sputa	....	21	Tubercle	1

(b) *Ambulance Facilities.* The arrangements have been described in previous reports, and the district is adequately served. For infectious cases, the West Cumberland Joint Hospital Board provides two ambulances, one stationed at Galemire Hospital, Cleator Moor, and one at Ellerbeck Hospital, Workington. For non-infectious cases, an ambulance is provided and maintained at Whitehaven by a Joint Ambulance Committee, of which Whitehaven is a member.

(c) *Day Nursery.* The Medical Officer of Health still continued the local administration of the Day Nursery for the County Council, that Authority being now responsible as Education and Welfare Authority.

The total number of children on the register throughout the year was 98:—

(a) Under two years of age 39

(b) 2-5 years of age	....	....	....	59
and the average daily attendance over the year was :—				
(a) Under two years of age	....	....	....	9
(b) 2-5 years of age	....	....	....	21

C.—SANITARY CIRCUMSTANCES OF THE AREA.

Sanitary matters are fully dealt with in a report by Mr. Lord, Sanitary Inspector, which is printed as an appendix, and few matters call for special comment.

I. HOUSING.

During 1947, fifty-two permanent houses were completed by the Local Authority. Two hundred and fifty more were in various stages of erection at the close of the year. These were distributed as follows :—

<i>Scheme</i>	<i>No. in Scheme</i>	<i>Completed 1947</i>	<i>In Course of Erection 1947</i>
Hensingham No. 4	102	37	65
Corkickle	200	15	185

In addition, thirty-six houses were completed by private enterprise, and twenty-nine were in course of erection, whilst nine flats were provided by the conversion of existing buildings.

The total number of Council houses actually occupied on 31st December, 1947, was 2,019 (including Prefabs.).

2. WATER SUPPLY.

The water supply is obtained from Lake Ennerdale, situated about eight miles from Whitehaven, and with the exception of a few isolated farms and houses the whole of the Borough is supplied from this source.

The water is chlorinated on its way to the town, but there is not sufficient gravitation to permit of filtration. Two samples (one bacteriological and one chemical and bacteriological), taken prior to chlorination, and nine samples (eight bacteriological and one chemical and bacteriological) taken after chlorination, were submitted for examination. All were reported to be of a pure and wholesome character, although those from the low level supply were, on the whole, not quite so good as those from the high level. This could quite easily be accounted for by some slight contamination at the open reservoir at Scraghill where the water lies exposed to the air after it has been chlorinated, and from which the low level supply is derived. The

results of examination of an unchlorinated and of a chlorinated sample are shown below :—

(i) *Unchlorinated Sample (5.5.47).*

	Parts per 100,000
Chlorine as Chlorides	1.1000
Nitrogen as Nitrates ....	.0220
Ammonia ....	.0034
Albuminoid Ammonia ....	.0035
Oxygen Absorption ....	.0356
Injurious Metals	None
Total Solid Matter dried at 100° C.	4.0000
pH Value of Sample	6.2
<hr/>	
Temporary Hardness 0. Degrees	
Permanent Hardness 0.6 „	
Colour of sample on Hazen Scale 3	
Appearance of sample in 2 foot tube	Not quite bright
Odour when heated to 50° C.	None

Microscopical Examination.
Satisfactory.

Bacteriological Examination.

Number of colonies on Nutrient Agar at 37° C. after 72 hours	7 in 2 ml.
Number of colonies on Nutrient Agar at 20-22° C. after 72 hours	6 per ml.
Presumptive B. Coli Test at 37°C.) after 72 hours)	Positive in 100 ml. Negative in 90 ml.
Clostridium Welchii Test at 45° C. in 40 ml.	1 medium and 2 small colonies.

Observations.

This sample affords no evidence of pollution by any foul drainage, and the development of organisms of the Welchii group is of no significance. In my opinion, the sample is of good and wholesome quality for human consumption.

(Signed) CYRIL J. H. STOCK.

(ii) *Chlorinated Sample (1.12.47).*

	Parts per 100,000
Chlorine as Chlorides	1.0000
Nitrogen as Nitrates ....	.0214
Ammonia ....	.0106
Albuminoid Ammonia ....	.0049
Oxygen Absorption ....	.1126

Injurious Metals	....	....	....	None
Total Solid Matter dried at 100° C.	....	....	....	2.0000
pH value of sample	....	....	....	6.2
<hr/>				
Temporary Hardness	....	....	....	None Degrees
Permanent Hardness	....	....	....	0.8 „
<hr/>				
Colour of sample on Hazen Scale	....	....	....	3
Appearance of Sample in 2 foot tube	....	....	....	Not quite bright.
Odour when heated to 50° C.	....	....	....	None

Microscopical Examination.

Small deposit from $\frac{1}{2}$ gallon, consisting of earthy matter, vegetable debris, fungus growths and some micro-organisms.

Bacteriological Examination.

Number of colonies on Nutrient Agar		
at 37° C. after 72 hours	....	3 per ml.
Number of colonies on Nutrient Agar		
at 20-22° C. after 72 hours	....	6 per ml.
Presumptive B. Coli Test at 37° C.		
after 72 hours	....	Negative in 100 ml.
Clostridium Welchii Test at 45° C.	....	Negative in 40 ml.

Observations.

The sample affords no evidence of contamination by drainage of an undesirable character judged both by the results of the chemical analysis and the bacteriological examination, while the matters noted under the microscope are of the nature to be expected in a supply derived from an upland source, but are entirely insignificant from the hygienic standpoint. In my opinion, the supply as represented by this sample, is of good and wholesome quality for human consumption.

(Signed) CYRIL J. H. STOCK.

No question of plumbo-solvency arose, and apart from the regular chlorination, no action was required in regard to contamination.

In quantity the supply to the various parts of the town was on the whole satisfactory—the average supply being approximately one-and-a-half million gallons per day.

Three groups of properties comprising fifty-six houses, with a population of approximately 244 people, are supplied by means of common taps with, in one group, as many as twelve houses per tap. The remainder have a direct supply, either indoor or outdoor, although in a number of cases one tap supplies more than one house.

Apart from extensions of mains to new properties, no major works were undertaken during the year.

Owing to circumstances outside the Council's control, the water scheme referred to in last year's report has had to be abandoned and a modified scheme is in course of preparation.

Whilst dealing with water and water samples, it might not be inappropriate to give here the report on the examination of a sample of water taken from the Public Swimming Bath, which was well up to the standard of a drinking water.

Sample from Salt Water Swimming Bath (25.6.47).

Number of colonies on Nutrient Agar at 37° C. after 72 hours	....	2 per ml.
Number of colonies on Nutrient Agar at 20-22° C. after 72 hours	....	3 in 2 ml.
Presumptive B. Coli Test at 37° C. after 72 hours	....	Negative in 100 ml.
Clostridium Welchii Test at 44° C. in 40 ml., after 48 hours	....	Negative
Free Chlorine	....	None

The sample, which is of a very high order of bacterial purity, is of satisfactory quality.

(Signed) CYRIL J. H. STOCK.

D.—PREVALENCE OF AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

I. NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS).

Infectious diseases notified during the year are shown by age-groups in the following table with the number admitted to Hospital and the number of deaths from these diseases.

Apart from some Measles there was almost an entire absence of any disease of an epidemic character.

(Table on Page 19)

SCARLET FEVER.

Two cases only were notified during the year. This gives a rate of 0.09 per 1,000 of population as compared with 1.37 for England and Wales. Neither case was admitted to hospital. There were no deaths.

DIPHTHERIA.

No cases were notified, nor were there any deaths from this disease. This gives a rate of nil per 1,000 of population as compared with 0.13 for England and Wales.

NOTIFIABLE DISEASES DURING THE YEAR.

DISEASE.	Total Cases	Under 1 Year	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 65	Over 65	Admitted to Hospital	Total Deaths
Scarlet Fever	2	—	—	—	—	—	2	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Pyrexia	* 8	—	—	—	—	—	—	—	—	6	2	—	—	—	—
Pneumonia (Primary and Influenzal)	9	—	—	—	1	—	—	—	—	4	2	1	1	— (all forms)	20
Ophthalmia Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	3	—	—	—	—	—	—	—	—	—	—	2	1	—	—
Cerebro-Spinal-Meningitis	2	—	—	—	—	—	1	—	—	—	—	1	—	2	—
Poliomyelitis	4	—	—	—	—	—	—	2	—	2	—	—	—	4	—
Measles	43	1	3	3	10	9	17	—	—	—	—	—	—	—	1
Whooping Cough	3	1	—	1	—	—	1	—	—	—	—	—	—	—	—

* 7 were notified from Whitehaven Hospital, including one case which did not belong to the District, but is included in this total.

The following Table shows the average number of notifications of Diphtheria, by five year periods, the incidence per 1,000 of population, the average annual number of deaths, and the mortality rate per 100 cases notified. The individual figures for the years 1936 (when immunisation was first commenced) to 1947 inclusive, are also shown.

Period	Av. Annual No. cases notified.	Av. No. Cases per 1,000 of Population.	Av. Annual No. of Deaths.	Av. Annual No of fatal cases per 100 notified.
1896—1900	7	0.4	2.0	29
1901—1905	12	0.6	3.4	28
1906—1910	8	0.4	2.2	28
1911—1915	9	0.5	2.0	22
1916—1920	7	0.4	2.0	29
1921—1925	16	0.8	0.6	4
1926—1930	14	0.7	0.8	6
1931—1935	18	0.8	2.2	12
1936—1940	15	0.7	0.6	4
1941—1945	4	0.2	0.0	0
*1936	31	1.3	3	10
1937	24	1.1	0	0
1938	14	0.6	0	0
1939	2	0.1	0	0
1940	4	0.2	0	0
1941	5	0.2	0	0
1942	2	0.1	0	0
1943	3	0.1	0	0
1944	8	0.4	0	0
1945	2	0.1	0	0
1946	3	0.1	0	0
1947	0	0.0	0	0

* Immunisation commenced in 1936.

It is worthy of note that there has not been a single death from Diphtheria since 1936.

DIPHTHERIA PROPHYLAXIS.

During 1947, a total of 404 new immunisations were completed, 351 in the 0-5 years-of-age group, and 53 in the 5-15 year groups.

In addition, 655 children were re-immunised, re-immunisation being available for children who have been immunised in infancy and are now beginning school, and for older children whose immunisation was done more than four years ago.

The total number of children immunised since the scheme began in 1936, has now reached the total of 9253, and these are shown by ages at the time of their original immunisation in the Table hereunder.

The position is highly satisfactory as regards the older children, and the number of the "under fives" who were immunised in 1947, showed a fall of 114, and the percentage in this group is considerably less than what is considered necessary to afford adequate protection.

PERCENTAGES OF CHILD POPULATION IMMUNISED.

(a) *0-5 years of age.*

The number of children in the age-groups 1943-1947 inclusive who were immunised on the 31st December 1947, and of whom the Local Authority has details, was 1,235—a nett gain for the year of 27. The number of children in these groups, according to a figure supplied by the Registrar-General, was 2,150, so that the percentage immunised was 57, a decrease of 3 per cent. over the number for the previous year, the decrease being due to the larger child population.

(b) *5-15 years of age.*

The number of children in the age-groups 1933-1942 inclusive who were immunised on the 31st December 1947, and of whom the Local Authority has details, was 3,862—100 less than the figure for the previous year. The number of children in these groups, according to a figure supplied by the Registrar-General, was 3,820, so that the percentage immunised was 100.

It should, however, be pointed out that the table does not allow for deaths, etc., in the numbers shown as immunised. The fact remains that this group is to all intents and purposes wholly immunised.

(c) *Over 15 years of age.*

The number over 15 years of age on the 31st December 1947, who have been immunised was 4,156.

(Table on Page 22)

PUERPERAL PYREXIA.

Eight cases were notified, 7 from Whitehaven Hospital, including one case belonging to another district. The other case was notified from home and was nursed there. The rate per 1,000 total births was 14.21 as compared with 7.16 for the country.

PNEUMONIA.

Nine cases of Acute Primary, or Influenzal Pneumonia

DIPHTHERIA IMMUNISATION.
PERSONS INOCULATED EACH YEAR 1936—1947.

Age in years on 31st Dec. of the cor- responding year.	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	Total inoculated aged under five years on 31st December, 1947.	
0	—	—	—	—	1	—	1	—	—	—	27	32	Total inoculated aged under five years on 31st December, 1947.	1235
1	—	—	—	2	4	42	125	189	206	168	241	240		
2	—	—	2	12	13	77	130	139	113	58	156	42		
3	—	—	6	19	23	73	120	99	65	8	28	23		
4	66	38	30	29	42	96	109	86	53	16	13	14		
5	222	139	146	126	162	188	134	120	53	28	17	18	Total inoculated aged 5—15 years on 31st December, 1947.	3862
6	222	73	68	37	79	116	58	71	48	37	19	14		
7	145	60	45	30	52	62	34	29	39	11	7	7		
8	19	163	41	12	32	61	34	32	46	7	3	2		
9	1	250	36	28	23	44	33	30	31	7	2	7		
10	1	272	55	23	15	33	28	22	16	10	4	5		
11	205	258	58	25	27	28	21	17	17	3	1	—		
12	208	118	63	21	10	30	24	15	19	2	—	—		
13	211	62	52	20	10	17	17	13	15	2	—	—		
14	204	43	58	15	1	15	6	8	3	6	—	—		
15 and over	—	8	4	—	—	65	4	4	—	—	—	—	Total inoculated aged 15 years and over on 31st Dec., 1947.	4156
Total each yr.	1504	1484	664	399	494	947	878	874	724	363	518	404		9253

were notified, giving a rate of 0.39 per 1,000 of population as compared with 0.79 for England and Wales. The number of deaths from Pneumonia (all forms) was 20, eight more than in the previous year.

OPHTHALMIA NEONATORUM.

No cases were notified.

ERYSIPELAS.

Three cases were notified, giving a rate of 0.13 per 1,000 of population as compared with 0.19 for England and Wales.

CEREBRO-SPINAL MENINGITIS.

Two cases were notified, giving a rate of 0.09 per 1,000 of population, compared with 0.05 for England and Wales. They were admitted to Hospital and made complete recoveries.

POLIOMYELITIS.

Four cases were notified and confirmed, giving a rate of 0.18 per 1,000 of population. Actually twelve persons were admitted to Hospital as definite or suspected cases, of whom four only were confirmed on Cytological findings after examination of the cerebro-spinal fluid.

Of these, three were non-paralytic or abortive cases, and one exhibited paralysis necessitating transfer to an Orthopaedic Hospital for treatment, from which he was discharged after three months. He still showed a considerable amount of impairment of movement in the lower limbs for which he was receiving, at the close of the year, appropriate aftercare through the County Orthopaedic Scheme.

The ages of the confirmed cases were :—

(a) Non-Paralytic or abortive cases—3 :—10, 20 and 33 years, and (b) Paralytic—1 :—12 years.

The non-confirmed cases included Pneumonia, Uraemia, Bell's Palsy, Scarlet Fever, Cerebro-Spinal Meningitis, and three in which no definite diagnosis was established, whilst their ages varied from 2 to 73 years.

MEASLES.

Forty-three cases were notified, exactly half the number for the previous year. The rate was 1.90 per 1,000 of population, compared with 9.41 for England and Wales. There was one death.

WHOOPING COUGH.

Three cases were notified, a decrease of twenty-seven cases on the previous year. The rate was 0.13 per 1,000 of population, compared with 2.22 for England and Wales. There were no deaths.

II.—CANCER.

There were 53 deaths from Cancer during the year, an increase of 15 compared with the number in 1946. The Mortality Rate from this disease was 2.35 per 1,000 of population, as compared with the figure for the country as a whole of 1.85.

The primary sites of the lesions were as follows :—

<i>Males</i>				<i>Females</i>			
Jaw	....	....	1	Orbit	....	....	1
Spine	....	....	1	Bronchus	....	....	1
Bronchus	....	....	2	Stomach	....	....	4
Lung	....	....	2	Colon	....	....	4
Stomach	....	....	13	Rectum	....	....	1
Colon	....	....	4	Breast	....	....	5
Rectum	....	....	4	Ovary	....	....	1
Kidney	....	....	1	Uterus	....	....	5
Brain	....	....	1	Bladder	....	....	1
Not stated	....	....	1				
			—				—
			30				23
			—				—

The average age at death of all cases was 61 years—of males 60, and of females 62.

The Death Rate from Cancer in the Borough as compared with the rate for England and Wales by five-year periods is shown in the following Table, together with the figures since 1945 :—

Period.	Borough of Whitehaven.		England and Wales.
	Average no. of deaths.	Average rate per 1,000 of population.	Average rate per 1,000 of population.
1901—05	17	0.90	0.87
1906—10	15	0.77	0.94
1911—15	17	0.87	1.05
1916—20	24	1.30	1.18
1921—25	23	1.11	1.27
1926—30	25	1.19	1.41
1931—35	31	1.39	1.53
1936—40	39	1.74	1.66
1941—45	34	1.41	1.87
1946	38	1.69	1.84
1947	53	2.35	1.85

PREVENTION OF BLINDNESS, ETC.

No action by the Local Authority was taken under Section 176 of the Public Health Act, 1936, for the prevention of blindness or for the treatment of persons suffering from any disease of or injury to the eyes, nor was any action required under the Public Health (Prevention of Tuberculosis) Regulations, 1925, nor under the Public Health Act, 1936, Section 172.

III. TUBERCULOSIS.

The following table shows the new cases and mortality for the Borough of Whitehaven during 1947, by age-groups and sex :—

Age Periods	New Cases				Deaths			
	Respiratory		Non-Resp't'y		Respiratory		Non-Resp't'y	
	Male	Female	Male	Female	Male	Female	Male	Female
0— 1	0	0	1	0	0	0	1	0
1— 5	0	0	1	0	0	0	1	0
5—10	0	0	0	1	0	0	0	1
10—15	0	0	0	0	0	0	0	0
15—20	1	4	0	0	0	2	0	0
20—25	2	3	1	0	0	0	0	0
25—35	4	4	0	0	1	2	1	0
35—45	2	2	1	0	2	2	0	0
45—55	0	0	0	1	0	0	0	0
55—65	1	0	0	1	3	0	0	0
65 and upwards	2	0	0	0	1	0	0	0
Total	12	13	4	3	7	6	3	1

Total new cases 32

Total Deaths 17

New Cases.—New cases include 5 Pulmonary cases—4 male and 1 female—notified from H.M. Forces, and also 1 death, which had not been previously notified. Altogether, the new cases show a decrease of 6 as compared with the figure for the previous year.

Deaths.—Deaths for the year were 11 fewer than in the previous year, respiratory deaths being 8 less, and non-respiratory deaths three less.

Of the 17 deaths, one had not been notified prior to death as suffering from this disease. This represents 6% of the total. In this case a satisfactory explanation was received from the practitioner concerned.

DEATH RATE.

Death Rate per 1,000 of population :—

	<i>Whitehaven</i>	<i>England and Wales</i>
Respiratory	0.58	0.47
Non-Respiratory	0.17	0.08
All Forms	0.75	0.55

The rate shows an improvement of 0.50 as compared with the rate for the previous year, but though this is a very great improvement, it is still almost half as much again as the rate for England and Wales as a whole.

The following Table shows the Death Rate per 1,000 of population from Tubercular Diseases in Whitehaven, as compared with England and Wales as a whole by five-year groups from 1911, together with the figures since 1945 :—

Groups	Tuberculosis (Respiratory)			Tuberculosis (all forms)		
	Whitehaven		England & Wales Death Rate per 1,000	Whitehaven		England & Wales Death Rate per 1,000
	Average Number of Deaths	Average Rate per 1,000		Average Number of Deaths	Average Rate per 1,000	
1911-15	19.8	1.03	1.05	34.6	1.81	1.41
1916-20	22.2	1.22	1.11	33.6	1.85	1.48
1921-25	22.2	1.10	0.86	29.8	1.47	1.08
1926-30	20.0	0.95	0.76	25.2	1.20	0.94
1931-35	20.4	0.94	0.61	26.8	1.23	0.81
1936-40	20.6	0.91	0.56	24.8	1.10	0.67
1941-45	17.0	0.76	0.55	23.6	1.05	0.66
1946	21	0.94	0.46	28	1.25	0.54
1947	13	0.58	0.47	17	0.75	0.55

The number of cases belonging to the district who received Sanatorium treatment during the year are shown in the following Table :—

SANATORIUM TREATMENT.

	In Institu- tions 1st Jan. 1947	Ad- mitted	Dis- char- ged	Died	In Institu- tions 1st Jan. 1948
PULMONARY CASES :					
Men	4	8	6	2	4
Women	3	14	6	—	11
Boys	—	—	—	—	—
Girls	—	—	—	—	—
PULMONARY CASES : Non-Pulmonary Cases :					
Men	—	1	—	—	1
Women	1	—	—	—	1
Boys	1	1	1	—	1
Girls	1	—	—	—	1
OBSERVATION CASES :					
Males	5	2	2	—	5
Females	4	2	2	—	4
Total	19	28	17	2	28

The above Table shows the number of Tuberculosis cases and Observation Tuberculosis cases from the Borough of Whitehaven that received Sanatorium treatment under the County Council Scheme during 1947. Altogether 47 cases from Whitehaven were treated in Sanatoria during the year, a decrease of 1 as compared with 1946.

The number of notified cases on the Tuberculosis Register at the end of 1947 was :—

Pulmonary—Males	....	....	....	89
—Females	....	....	....	86
Non-Pulmonary—Males	....	....	....	33
—Females	....	....	....	22
				<hr/>
Total	....			230
				<hr/>

APPENDIX.

SANITARY INSPECTOR'S
REPORT

Health Department,
81, Lowther Street,
Whitehaven.

February, 1948.

*To The Medical Officer of Health,
Whitehaven.*

Sir,

I beg to submit my twenty-fifth Annual Report for the year ended 31st December, 1947.

Eighty-two preliminary notices have been served during the year, and it has not been necessary to serve any statutory notices. Only work of an urgent nature has been asked for, and this has always been done without delay.

INSPECTIONS.

Visits to Slaughterhouses	....	....	....	....	579
„ „ Bakehouses	....	....	....	....	20
„ „ Factories	....	....	....	....	89
„ „ Dairies, Cowsheds and Milk Shops	....	....	....	....	93
„ „ Food Preparing Premises	....	....	....	....	233
„ „ Ice Cream Premises	....	....	....	....	11
„ „ Shops	....	....	....	....	85
„ „ Verminous Houses	....	....	....	....	5
„ „ Offensive Trades	....	....	....	....	10
„ „ Caravans	....	....	....	....	25
„ „ New Drainage Work	....	....	....	....	82
„ „ Vessels in Harbour	....	....	....	....	105
„ „ Rat Infested Premises	....	....	....	....	8
Cases of Infectious Disease investigated	....	....	....	....	50
Visits after Infectious Disease	....	....	....	....	32
Milk Samples obtained	....	....	....	....	117
Water Samples obtained	....	....	....	....	12
Housing Inspection under Public Health Act	....	....	....	....	255
Housing Inspection under Housing Act.	....	....	....	....	12
Interviews with Owners or Occupiers	....	....	....	....	481
Miscellaneous Visits and Inspections	....	....	....	....	209
Total					2,513

IMPROVEMENTS.

Obstructed Drains Cleansed	....	....	....	....	27
New Gullies fixed	....	....	....	....	I
Drains repaired or relaid	....	....	....	....	II
New Pedestal W.C.'s provided	....	....	....	....	II
New Flushing Cisterns Fixed	....	....	....	....	4
Flushing Cisterns repaired	....	....	....	....	12
House Roofs repaired	....	....	....	....	44
Plastering repaired	....	....	....	....	25
Windows repaired	....	....	....	....	6
New Floors laid	....	....	....	....	2
Dust Bins provided	....	....	....	....	10
Cowsheds limewashed	....	....	....	....	50
Offensive Accumulations Removed	....	....	....	....	3
Houses Disinfected	....	....	....	....	16
Total					222

FACTORIES.

INSPECTIONS.

Premises	Number on Register	Number of		
		Inspection	Written Notices	Occupiers Prosecuted
(1) Factories in which Sections 1, 2, 3, 4 & 6 are to be enforced by Local Authority	32	20	—	—
(2) Factories not included in (1) to which Section 7 applies				
(a) Subject to the Local Authority (Transfer of Enforcement) Order, 1938	99	88	4	—
(b) others	—	—	—	—
(3) Other premises under the Act (excluding outworkers' premises)	—	1	—	—
Total	131	109	4	—

CASES IN WHICH DEFECTS WERE FOUND.

Particulars	Number of cases in which defects were found				Number of cases in which prosecutions were instituted
	Found	Remedied	Referred To H.M. Inspector	By H.M. Inspector	
Want of Cleanliness	1	1	—	—	—
Overcrowding	—	—	—	—	—
Unreasonable temperature	—	—	—	—	—
Inadequate Ventilation	—	—	—	1	—
Ineffective drainage of floors	—	—	—	—	—
Sanitary Conveniences:					
(a) Insufficient	—	—	—	—	—
(b) Unsuitable or defective	5	1	—	1	—
(c) Not separate for sexes	—	—	—	—	—
Other offences (not including offences relating to Home-work)	—	—	—	—	—
Total	6	2	—	2	—

In all cases the work was carried out or was in hand at the end of the year.

SHOPS.

Eighty-five visits were paid to shops, and it was not found necessary to make any complaint.

SMOKE ABATEMENT.

It was again necessary in only one case to draw attention to the excessive amount of smoke emitted from a factory chimney.

VERMINOUS HOUSES.

The number of houses found to be infested with vermin was 4, viz.:—

Council Houses	....	....	....	....	....	2
Other Houses	....	....	....	....	....	2

In none of the cases was any extensive infestation found to exist, and the premises were cleared by spraying with Zaldecide.

HOUSING.

No systematic work has been done during the year, and inspections have been confined to premises in respect of which complaint has been received.

These invariably refer to properties scheduled as Clearance Areas, and defects or nuisances of an urgent nature have been remedied, but no work involving extensive repair or alteration has been attempted.

During the year Demolition Orders were made on two houses, and the tenants were re-housed in Council Houses.

OVERCROWDING.

No accurate figure can be given regarding overcrowding. Owing to the difficult conditions existing at present, it is not possible to insist on the fixed standard being maintained, but wherever it is possible to do so, bad cases are dealt with by arranging an exchange in the case of Council houses, and by arrangement with the owners where privately owned property is involved.

INSPECTION AND SUPERVISION OF FOOD.

MILK SUPPLY.

There are 25 producers resident in the Borough, viz.:—
1 Tuberculin Tested, 15 accredited, and 9 ungraded. In addition 10 outside producers, viz.:—5 Tuberculin Tested, 2 accredited, 2 ungraded, and 1 pasteurised, supply milk either wholesale or retail in Whitehaven.

There are 27 retailers registered for the sale of milk, viz.:—

12 Producer-Retailers resident in the Borough.

3 Producer-Retailers resident outside the Borough.

12 Retailers resident inside or outside the Borough.

SAMPLES.

During the year 117 samples were submitted for bacteriological examination, the results being as follows :—

<i>Grade</i>	<i>No.</i>	<i>Satisfactory</i>	<i>Unsatisfactory</i>
T.T.	33	25—76%	8—24%
Accredited	60	44—73%	16—27%
Ungraded	24	12—50%	12—50%

The standard taken as satisfactory for Ungraded milk is that of Accredited milk.

Fifty-five samples were examined for T.B. and one was positive. The result was communicated to the County Council.

Ninety-three visits have been paid to the Cowsheds and dairies, and generally they have been found satisfactory.

FOOD PREPARING PREMISES.

Two hundred and forty four visits were paid to premises where food is prepared, including the inspection of ice cream premises.

When the Ice Cream (Heat Treatment) Regulations, 1947, came into operation on May 1st there were 15 premises registered under Section 14 of the Food and Drugs Act, 1936, viz :—11 for manufacture and selling, and 4 for selling only. Of the 11 manufacturers, 2 decided to discontinue the making of ice cream until they were in a position to obtain the necessary equipment, and the remaining 9 immediately proceeded to order all necessary equipment, and to carry out extensive alterations to their premises or to obtain alternative premises.

A considerable amount of work had been done at the close of the year in all the premises affected and some of the equipment had been obtained.

SLAUGHTERHOUSE AND MEAT INSPECTION.

The central slaughterhouse, where slaughtering is still carried on for the districts of Whitehaven, Workington, and Ennerdale Rural, has been conducted satisfactorily.

As in previous years, 100 per cent. inspection has been maintained, and one Inspector is employed practically full-time at the slaughterhouse.

The relations between the members of the department with the slaughterhouse manager, the Wholesale Meat Agent, and the Retail Buying Committee have continued to be satisfactory.

The following table shows the number of animals slaughtered and the condemnations during the year.

	Cattle ex- cluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed 	2,323	845	5,025	11,314	55
Number inspected 	2,323	845	5,025	11,314	55
<i>All Diseases Except Tuberculosis</i>					
Whole carcasses condemned	11	32	42	40	—
Carcases of which some part or organ was condemned 	61		11	94	—
Percentage of the number inspected affected with disease other than Tuberculosis 	3.28		1.05	1.19	—
<i>Tuberculosis only</i>					
Whole carcasses condemned	7	33	5	—	2
Carcases of which some part or organ was con- demned 	54 6		4	—	—
Percentage of the number inspected affected with Tuberculosis 	18.50		0.18	—	3.64

Total Weight of Meat Condemned, 32 tons, 2 cwts, 83 lbs.

OTHER ARTICLES OF FOOD SURRENDERED.

Miscellaneous Tinned Meats	....	....	....	1626lbs.
Miscellaneous Tinned Fruit and Vegetables	....			727lbs.
Tinned Milk	....	....	....	416lbs.
Tinned Fish	....	....	....	140lbs.
Frozen Beef	....	....	....	3223lbs.
Bacon, Ham, Pork	....	....	....	140lbs.
Eggs	....	....	....	160lbs.
Fish Cakes	....	....	....	304lbs.
Fish (Wet)	....	....	....	622lbs.
Cereals	....	....	....	337lbs.
Various	....	....	....	380lbs.
Fruit	....	....	....	370lbs.
Potatoes	....	....	....	1680lbs.
Dried Egg	....	....	....	77lbs.
Total				10,702lbs.

OFFENSIVE TRADES.

There is still only one offensive trade on the Register viz.:—A Rag and Bone Dealer.

Ten visits have been paid to the premises and generally they have been conducted satisfactorily.

I am, Sir,

Your obedient servant,

J. F. LORD,

Sanitary Inspector.

